

HYBRID SYNCHRONOUS/INDUCTION GENERATOR POWER PLANT

Abstract

A power generation plant comprising a power generating unit that includes at least one first generator, such as an induction generator, coupled to at least one synchronous generator having a rotor with a superconducting (SC) coil. The induction generator and the SC synchronous generator are coupled so that the SC synchronous generator supplies the induction generator with reactive power. Sufficient reactive power is preferably generated by the SC synchronous generator to meet the demand of the induction generator for VARs, as well as permit the induction generator to have a relatively large airgap.